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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,267	12/21/2001	Jeffery D. Lind	8350.1642-00	4973

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Finnegan, Henderson, Farabow,
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Washington, DC 20005-3315

EXAMINER

ALHIJA, SAIF A

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,267

Applicant(s)

LIND, JEFFERY D.

Examiner

Saif A. Alhija

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/12/05</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

1. Claims 1-49 have been presented for examination based on the application filed on 21 December 2001.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 21 December 2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the Examiner has considered the IDS as to the merits.

Claim Objections

Claim 31 is objected to under 37 CFR 1.75(c), as being of improper dependent form. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 31 recites a system whereas Claim 24 of which it is dependent upon recites a method, which represents a statutory conflict. After evaluation, the Examiner believes the applicant intended Claim 31 to be dependent upon Claim 27 and not Claim 24 and will operate under that assumption.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claim(s) 1-49** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Bradbury et al. "System and Method for Rapidly Customizing a Design and Remotely Manufacturing Biomedical Devices using a Computer System."** U.S. Patent Publication # 2002/0007294.

Regarding Claim 1:

Bradbury et al Discloses A method for simulating one or more components, comprising: establishing an engineering model of a component (Paragraph 15, Lines 7-8); receiving selection data for configuring the component from a user (Paragraph 15, Lines 3-5); establishing a web-based model of the component based on the selection data and the engineering model (Paragraph 14, Lines 3-5); and performing a simulation of the web-based model (Paragraph 14, Lines 7-9).

Regarding Claim 2:

Bradbury et al Discloses The method of claim 1, wherein performing the simulation of the web-based model includes: performing the simulation of the

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web-based model in a simulation environment. (Paragraph 22, Lines 2-6)

Regarding Claim 3:

Bradbury et al Discloses The method of claim 1, further including: providing, to the user, feedback data reflecting characteristics of the web-based model during the simulation. (Paragraph 29, Lines 1-3)

Regarding Claim 4:

Bradbury et al Discloses The method of claim 1, wherein receiving selection data includes: providing an option to the user reflecting a sub-component that may be associated with the component, wherein the selection data includes the sub component selected by the user. (Paragraph 26, Lines 1-5)

Regarding Claim 5:

Bradbury et al Discloses The method of claim 4, wherein providing an option further includes: providing, to the user, a web-based model of the sub-component based on a corresponding engineering model of the sub-component. (Paragraph 14, Lines 3-5)

Regarding Claim 6:

Bradbury et al Discloses The method of claim 5, wherein the web-based model of the sub-component is a 3D image of the sub-component that may be manipulated by the user. (Paragraph 22, Lines 1-2 and Paragraph 26, Lines 1-5)

Regarding Claim 7:

Bradbury et al Discloses The method of claim 1, wherein establishing a web-based model of the component includes: detecting a change to the engineering model of the component; and updating the web-based model of the component based on the detected change. (Paragraph 29, Lines 1-3)

Regarding Claim 8:

Bradbury et al Discloses The method of claim 1, wherein establishing a web-based model of the component includes: lightening the engineering model; and establishing the web-based model based on the lightened engineering model. (Paragraph 26, Lines 1-5)

Regarding Claim 9:

Bradbury et al Discloses The method of claim 1, wherein the web-based model is a 3D image model. (Paragraph 22, Lines 1-2)

Regarding Claim 10:

Bradbury et al Discloses The method of claim 1, wherein the web-based model includes a 3D image model of the component and textual data associated with at least one of physical, functional, and marketing characteristics of the component. (Paragraph 31, Lines 1-5)

Regarding Claim 11:

Bradbury et al Discloses The method of claim 1, wherein performing a simulation of the web-based model includes: providing, to the user, one or more options reflecting various simulation environments that the web-based model may be simulated within; receiving a selection from the user reflecting a selected simulation environment; and performing a simulation of the web-based model in the selected simulation environment. (Paragraph 27, Lines 5-8)

Regarding Claim 12:

Bradbury et al Discloses The method of claim 1, wherein performing a simulation of the web-based model includes: allowing the user to control the operation of the web-based model using an input interface; and performing simulations of the web-based model in the simulation environment based on data received from the input interface. (Paragraph 15, Lines 3-5)

Regarding Claim 13:

Bradbury et al Discloses The method of claim 2, wherein the simulation environment includes a simulated load and wherein performing a simulation of the web-based model includes simulating a manipulation of the simulated load by the web-based model. (Paragraph 32, Lines 5-12 and Paragraph 34, Lines 1-4))

Regarding Claim 14:

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Bradbury et al Discloses The method of claim 13, further including: providing, to the user, feedback data reflecting at least one of physical and functional characteristics of the web-based model based on the simulated manipulation. (Paragraph 32, Lines 5-12)

Regarding Claim 15:

Bradbury et al Discloses The method of claim 2, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment that may be associated with the configured web-based model, and wherein performing a simulation of the web-based model includes simulating operation of the web-based model in the simulated work environment. (Paragraph 26, Lines 12-15)

Regarding Claim 16:

Bradbury et al Discloses The method of claim 15, further including: providing, to the user, feedback data reflecting at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment. (Paragraph 32, Lines 5-12)

Regarding Claim 17:

Bradbury et al Discloses The method of claim 1, wherein the simulation environment includes a simulated surface and wherein performing a simulation of

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the web-based model includes simulating operation of the web-based model on the simulated surface. (Paragraph 32, Lines 5-12)

Regarding Claim 18:

Bradbury et al Discloses The method of claim 17, further including: providing, to the user, feedback data reflecting at least one of physical and functional characteristics of the web-based model based on the simulated operation. (Paragraph 32, Lines 5-12)

Regarding Claim 19:

Bradbury et al Discloses The method of claim 2, wherein the simulation environment includes a type of work environment and a work operation to be performed by the web-based model in the work environment. (Paragraph 32, Lines 5-12)

Regarding Claim 20:

Bradbury et al Discloses The method of claim 19, wherein performing the simulation of the web-based model includes: establishing a plurality of duplicate web-based models of the component; and simulating the work operation in the work environment using the duplicate web-based models. (Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)

Regarding Claim 21:

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Bradbury et al Discloses The method of claim 20, further including: providing, to the user, feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation (Paragraph 29, Lines 1-3).

Regarding Claim 22:

Bradbury et al Discloses The method of claim 20, further including: providing, to the user, feedback data reflecting performance information associated with the work operation in the work environment. (Paragraph 32, Lines 5-12)

Regarding Claim 23:

Bradbury et al Discloses The method of claim 20, wherein simulating the work operation in the work environment further includes: allowing the user to adjust the number of duplicate web-based models performing the work operation and to adjust the configuration of the duplicate web-based models. (Paragraph 35, Lines 5-8)

Regarding Claim 24:

Bradbury et al Discloses The method of claim 2, wherein the simulation environment is a virtual repair environment. (Paragraph 14, Lines 10-12 and Paragraph 33, Lines 9-13)

Regarding Claim 25:

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Bradbury et al Discloses The method of claim 24, wherein performing simulations of the web-based model includes: allowing the user to perform a virtual repair of the web-based model in the virtual repair environment.

(Paragraph 32, Lines 5-12)

Regarding Claim 26:

Bradbury et al Discloses The method of claim 2, wherein the simulation environment is a virtual training environment and performing simulations of the web-based model includes providing instructional information to the user while the user operates the web-based model in the virtual training environment, wherein the instructional information may include at least one of image, voice, and textual information instructing the user on the operation of the web-based model. (Paragraph 32, 5-12)

Regarding Claim 27:

Bradbury et al Discloses A system for simulating one or more components, comprising: a client system operated by a user; and a server system, including: a process for receiving configuration data from the client system reflecting a configuration of a component selected by the user; a process for establishing a web-based model of the component based on the configuration data and an engineering model of the component; a process for providing, to the client system, a simulation of the web-based model; and a processor for executing the processes for receiving, creating, and providing. (Paragraph 14, Lines 3-5, 7-9)

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and Paragraph 5, Lines 3-5, 7-8)

Regarding Claim 28:

Bradbury et al Discloses The system of claim 27, wherein the process for providing includes a process for providing, to the client system, feedback data reflecting characteristics of the web-based model during the simulation.

(Paragraph 29, Lines 1-3)

Regarding Claim 29:

Bradbury et al Discloses The system of claim 27, wherein the process for establishing a web-based model of the component includes: a process for detecting a change to the engineering model of the component; and a process updating the web-based model of the component based on the detected change.

(Paragraph 29, Lines 1-3)

Regarding Claim 30:

Bradbury et al Discloses The system of claim 27, wherein the process for establishing a web-based model of the component includes: a process for lightening the engineering model; and a process for establishing the web-based model based on the lightened engineering model. (Paragraph 26, Lines 1-5)

Regarding Claim 31:

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(The Examiner believes the applicant intended Claim 31 to be dependent upon Claim 27 and not Claim 24 and will operate under that assumption)

Bradbury et al Discloses The system of claim 27, wherein the process for providing a simulation of the web-based model includes: a process for providing, to the client system, one or more options reflecting various simulation environments that the web-based model may be simulated within; a process for receiving a selection from the client system reflecting a simulation environment selected by the user; and a process for performing a simulation of the web-based model in the selected simulation environment. (Paragraph 27, Lines 5-8)

Regarding Claim 32:

Bradbury et al Discloses The system of claim 31, wherein the process for providing a simulation of the web-based model includes: a process for receiving input data from the client system; and a process for manipulating the web-based model in the selected simulation environment based on the input data. (Paragraph 15, Lines 3-5)

Regarding Claim 33:

Bradbury et al Discloses The system of claim 27, wherein the process for performing a simulation of the web-based model includes a process for simulating operation of the web-based model in a simulation environment, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space,

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subterranean, and atmospheric work environment that may be associated with the configured web-based model and wherein the process for performing a simulation of the web-based model includes a process for simulating operation of the web-based model in a simulated work environment. (Paragraph 26, Lines 12-15)

Regarding Claim 34:

Bradbury et al Discloses The system of claim 33, further including: a process for providing feedback data reflecting at least one of physical and functional characteristics of the web-based model during the simulating operation. (Paragraph 32, Lines 5-12)

Regarding Claim 35:

Bradbury et al Discloses The system of claim 27, wherein the process for providing the simulation of the web-based model includes: a process for establishing a plurality of duplicate web-based models of the component; and a process for simulating a selected work operation in the selected simulation environment using the duplicate web-based models. (Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)

Regarding Claim 36:

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Bradbury et al Discloses The system of claim 35, further including: a process for providing feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation. (Paragraph 29, Lines 1-3)

Regarding Claim 37:

Bradbury et al Discloses The system of claim 27, wherein the process for providing a simulation of the web-based model includes a process for simulating a virtual repair of the web-based model in a simulation environment. (Paragraph 32, Lines 5-12)

Regarding Claim 38:

Bradbury et al Discloses A computer-readable medium including instructions for performing a method, when executed by a processor, for simulating one or more components, the method comprising: establishing an engineering model of a component; receiving selection data for configuring the component from a user; establishing a web-based model of the component based on the selection data and the engineering model; and performing a simulation of the web-based model. (Paragraph 14, Lines 3-5, 7-9 and Paragraph 5, Lines 3-5, 7-8)

Regarding Claim 39:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes: performing a

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simulation of the web-based model in a simulation environment. (Paragraph 22, Lines 2-6)

Regarding Claim 40:

Bradbury et al Discloses The computer-readable medium of claim 38, further including: providing, to the user, feedback data reflecting characteristics of the web-based model during the simulation. (Paragraph 29, Lines 1-3)

Regarding Claim 41:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein establishing a web-based model of the component includes: detecting a change to the engineering model of the component; and updating the web-based model of the component based on the detected change. (Paragraph 29, Lines 1-3)

Regarding Claim 42:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein establishing a web-based model of the component includes: lightening the engineering model; and establishing the web-based model based on the lightened engineering model. (Paragraph 26, Lines 1-5)

Regarding Claim 43:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes: providing, to the client

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system, one or more options reflecting various simulation environments that the web-based model may be simulated within; receiving a selection from the client system reflecting a simulation environment selected by the user; and performing a simulation of the web-based model in the selected simulation environment.

(Paragraph 27, Lines 5-8)

Regarding Claim 44:

Bradbury et al Discloses The computer-readable medium of claim 43, wherein performing a simulation of the web-based model includes: receiving input data from the client system; and manipulating the web-based model in the selected simulation environment based on the input data. (Paragraph 15, Lines 3-5)

Regarding Claim 45:

Bradbury et al Discloses The computer-readable medium of claim 39, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment that may be associated with the configured web-based model and wherein performing a simulation of the web-based model includes simulating operation of the web-based model in the simulated work environment. (Paragraph 26, Lines 12-15)

Regarding Claim 46:

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Bradbury et al Discloses The computer-readable medium of claim 45, further including: providing, to the user, feedback data reflecting at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment. (Paragraph 32, Lines 5-12)

Regarding Claim 47:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein performing the simulation of the web-based model includes: establishing a plurality of duplicate web-based models of the component; and simulating a selected work operation in the selected simulation environment using the duplicate web-based models. (Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)

Regarding Claim 48:

Bradbury et al Discloses The computer-readable medium of claim 47, further including: providing, to the user, feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation. (Paragraph 29, Lines 1-3)

Regarding Claim 49:

Bradbury et al Discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes simulating a virtual

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repair of the web-based model in a simulation environment. (Paragraph 32, Lines 5-12)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references include:

A) **“Improving the Aircraft Design Process Using Web-Based Modeling and Simulation”**. ACM Transactions on Modeling and Computer Simulation, Vol. 10, No. 1, January 2000, Pages 58–83. John A. Reed, Gregory J. Follen, and Abdollah A. Afjeh. January 2000.

B) **“Web Based Modeling and Simulation”**. Proceedings of the 2000 Winter Simulation Conference. S. Narayanan. 2000.

6. All Claims are rejected.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saif A. Alhija whose telephone number is (571) 272-8635. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 15, 2005



JEAN R. HOMERE
PRIMARY EXAMINER